

ABSTRACT OF THE DISCLOSURE

Disclosed is a method and a medical device comprising a bio-compatible polymeric product with a layered structure comprising at least one upper layer of a first polymeric component, a middle layer of a second polymeric component, and at least one lower layer of a third polymeric component, wherein the chain length of the first polymeric component and the third polymeric component is longer than the chain length of the second polymeric component. The medical device combines the features of strength, durability and bio-compatibility as well as it has resistance to tear and wear and has a good compressibility. A preferred design of the medical device is a cup produced from a core or film of LDPE surrounded by two layers of UHMWPE fabric. The medical device can be used as implants in mammals, especially as artificial cartilage within joints to secure mobility of the joint.